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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,574	11/16/2000	John M. Packes JR.	00-068	5486

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EXAMINER	
DURAN, ARTHUR D	
ART UNIT	**PAPER NUMBER**
3622	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/714,574	Applicant(s) PACKES ET AL.
	Examiner Arthur Duran	Art Unit 3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-28 have been examined.

Response to Amendment

2. The Amendment filed on 9/7/04 is sufficient to overcome the prior rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-16, 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are rejected under 35 U.S.C. 101 because these claims have no connection to the technological arts. The method claims do not specify how the claims utilize any technological arts. For example, no network or server is specified. To overcome this rejection, the Examiner recommends that the Applicant amend the claim to specify or to better clarify that the method is utilizing a medium or apparatus, etc within the technological arts. Appropriate correction is required.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or

composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson,* 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

> The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.,* the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system

for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the current application, no technological art (i.e., computer, network, server) is being utilized by claims 1-16, 28. At least one step of the body of the claims must explicitly utilize the technological arts. The body of the claims must explicitly utilize the vending machine. The body of the claims could be read that a customer is standing near a vending machine, then a human manually 'receives a request...identifies a condition...outputs an offer' (paraphrased from claim 1). Appropriate correction is required.

Double Patenting

4. Claims 1-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of any of the copending Application No. 09/218085, 09/540709, 09/994810, 09/688372, or 09/713001. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application contains an obvious variation recitation in claim language as applied to the copending application. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata (6,115,649) in view of Groover (4,717,043) and in view of Deaton (5,687,322).

Claim 1-4, 6-9, 11-15, 17, 18, 23, 27, 28: A method, system of operating a vending machine, comprising:

Sakata discloses receiving a request for a transaction from a customer at the vending machine or detecting a customer in proximity to the vending machine (col 2, line 60-col 3, line 32; col 1, line 65-col 2, line 10; col 10, lines 4-11);

outputting an offer to the customer in response to the received request (col 10, lines 10-22; col 10, lines 4-11).

Sakata futher discloses that the distributor can do market research on products to better entice customers to make purchases and that coupons can be presented to users at the vending machine (col 10, lines 10-22).

Sakata further discloses determining whether the requested transaction can be performed by the vending machine (col 1, lines 54-64); and

if it is determined that the requested transaction cannot be performed by the vending machine (col 1, line 54-64), outputting an offer to the customer in response to the received request (col 10, lines 10-22; col 10, lines 4-11).

Sakata further discloses the utilization of a trigger signal (Fig. 3a; Fig. 11; Fig. 12).

Also, note that Sakata's Manufacutrer/Distributor is functionally equivalent to a Retailer and that the Host Computer can obviously be located at the Manufacturer/Distributor (Fig. 12).

Sakata does not explicitly disclose that the coupon offered to the user can be based on a condition at a retail establishment.

Groover further discloses that coupons can be distributed by vending machines to promote retailer products (col 1, lines 15-20).

Deaton further discloses presenting coupons to the user via a terminal and that an incentive can be a coupon (col 7, lines 30-35). Deaton further discloses that coupons can be presented to a user based on conditions at a retail store (col 103, lines 5-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Groover's product related coupon dispensed at a vending machine and Deaton's targeted or situation specific coupons to Sakata's surveying a user about products available at a store and presenting a user with a coupon. One would have been motivated to do this in order to entice the user to purchase the products available at a store.

Deaton further discloses that the outputted offer includes a coupon to be redeemed at the retail establishment (col 103, lines 5-25); that the outputted offer includes a redemption code (col 102, lines 35-50); that the condition is a frequency of sales transactions at the retail establishment (col 103, lines 5-25); that the condition relates to a state of inventory at the retail establishment

(col 103, lines 5-25). Deaton further discloses that the condition relates to whether a particular product is in stock at the retail establishment (col 103, lines 5-25). Note that the a product being in stock is an obvious variation of the state of inventory of a product.

Deaton further discloses the step of selecting the offer from among a plurality of offers (col 68, line 49-col 69, line 45); that the selecting step includes generating a selection signal at the retail establishment (col 69, line 15-45).

Claim 5: Sakata, Groover, and Deaton disclose the method of claim 1. Sakata does not explicitly disclose that the condition is a state of a service queue at the retail establishment.

However, Deaton further discloses minimizing the time in a queue and that customers do not like to be in long queues (col 3, lines 9-15).

Deaton further discloses that customers can be deemed valuable and presented with coupons in different manners dependent upon how valuable that customer is deemed to be (col 68, line 49-col 70, lines 15).

Deaton further discloses that the coupon can be given based on a variety of conditions (col 103, lines 20-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Deaton's keeping a customer satisfied, avoiding long lines, and presenting a customer with a coupon to Sakata' enticing a customer to make a purchase at a vending machine and making an offer to the customer. One would have been motivated to do this in order to make offers to the customer that will keep the customer more satisfied.

Claim 10: Sakata, Groover, and Deaton disclose the method of claim 1. Sakata further discloses the step of storing at the vending machine data representative of the offer (col 10, lines 22-25).

Claim 16: The method of claim 13, wherein the determining step includes determining whether the vending machine is out of stock of an item requested in the request for a transaction (col 1, line 54-64).

Claim 19: Sakata, Groover, and Deaton disclose the method of claim 17. Deaton further discloses that the presenting of a coupon to a user deemed valuable can be decided upon and performed by a human operator (col 69, lines 1-15).

Sakata further discloses automatic operations replaces manual operations (col 1, lines 37-42; col 1, lines 45-50).

Sakata further discloses adapting to special situations (col 1, lines 53-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that any of Sakata's automatic processes can also be initiated manually. One would have been motivated to do this in order to provide better control of the process for any special situations.

Claim 20: Sakata, Groover, and Deaton disclose the method of claim 17. Sakata further discloses that the trigger signal is generated and transmitted automatically (col 10, lines 10-26; Fig. 12; Fig. 11; Fig .3a.).

Claim 21: Sakata, Groover, and Deaton disclose the method of claim 17. Sakata further discloses that the trigger signal is transmitted directly from the retail establishment to the vending machine (Fig. 12). Note that in the independent claim it was established that it was

obvious that the host computer could also be located at the manufacturer/distributor/retailer location.

Claim 22, 24: Sakata, Groover, and Deaton disclose the method, system of claim 17, 23. Sakata further discloses that the trigger signal is transmitted from the retail establishment to the vending machine by way of a controller located remotely from the retail establishment (Fig. 11; Fig. 12).

Claim 25: Sakata, Groover, and Deaton disclose the system of claim 23. Sakata futher discloses that said vending machine is installed outside said retail establishment (Fig. 12).

Claim 26: Sakata, Groover, and Deaton disclose the system of claim 25. Sakata further discloses that said vending machine is located remotely from said retail establishment (Fig. 12).

Response to Arguments

6. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Examiner notes that while specific references were made to the prior art, it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being referred to.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Barnett (6,321,208) discloses presenting targeted incentives to a customer utilizing a kiosk;

b. Naftzger (5,924,078); Tedesco (6,085,888); Burdette (5,965,876); Cullum (3,752,287); Bachmann (4,454,670); King (4,498,570); King (4,554,419); Hayashi (4,654,800) discloses presenting coupons or incentives utilizing a vending machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (703)305-4687. The examiner can normally be reached on Mon- Fri, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (703)305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arthur Duran
Patent Examiner
11/18/04